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EXAMINER

NGUYEN, MAIKHANH

ART UNIT	PAPER NUMBER
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2176

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05/30/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/493,517

Applicant(s)

FUCHS ET AL.

Examiner

Maikhanh Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-18, 20-26 and 30-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-18, 20-26, and 30-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is responsive RCE filed 03/07/2007 to the application filed 01/28/2000.

Claims 14-18, 20-26, and 30-37 are presented for examination. Claims 1-13, 19, and 27-29 have been canceled. Claims 36-37 have been added. Claims 14, 25, 31, and 36 are independent claims.

Request Continuation for Examination

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 03/07/2007 has been entered.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 14-30 are rejected under 35 U.S.C. 102(e) as being unpatentable over **Call** (US 6418441, filed 07/2000, priority filed on May 21, 1999) in view of **Ra et al.** "A Transparent Schema-Evolution System Based on Object-Oriented View Technology", July/August 1997, pp. 600-624.

As to claim 25:

Call teaches a computer network system for processing a document instance of a markup language (*e.g., By storing product information expressed in Extensible Markup Language (XML), and by using stylesheet information provided by the web site which is incorporating product information into their web presentations, the data supplied by the manufacturer can be rendered using font sizes, typefaces, background colors and formatting selected by the web page producer. Other characteristics of XML, including*

the ability to encourage or enforce conformity with content and formatting standards through the use of Document Type Definitions (DTD's) and the Resource Definition Framework (RDF) and Syntax Specification, facilitate the integration of data from retailers and other web page producers with the product information provided by manufacturers; see col.3, lines 1-14), the computer system comprising:

- *means for defining a first schema in the computer network system (e.g., Using the Document Type Descriptor (DTD) component of XML), including a plurality of elements (e.g., component of XML and ... optional components) from a markup language (e.g., XML), in a first schema (e.g., base "product" schema) [see the discussion beginning at col.25, line 10] in the computer network system;*
- *means for extending (e.g., extending/ evolve) a definition the first tag by use of the second schema (e.g., descendant schema) residing on the computer network system, the second schema defining a second tag (e.g., Using the Document Type Descriptor (DTD) component of XML) by reference to the first tag that incorporates in the second schema the plurality of elements from the markup language and by including additional elements (e.g., The metadata capabilities of XML can be used to advantage to provide an extensible system for dividing product and company information into a hierarchy of nested named elements which can be selectively accessed. Using the Document Type Descriptor (DTD)*

component of XML, the makeup of the required and optional components of such information can be defined in a standard way, facilitating the definition and validation of data structures to be used on various classes of products ... RDF provides a mechanism for defining metadata in a class system much like the class systems used by object oriented programming and modeling systems. Classes are organized in a hierarchy, with a collection of classes used for a particular purpose (such as the collection of classes describing a "product" and/or the collection of classes describing a "company") being called a "schema." RDF thus offers extensibility through subclass definition. For example, creating subclasses for a particular kinds of product (e.g., publications, software, foods, clothing, etc.) requires only incremental modification of a base "product" schema, and each such subclass may then be further modified to form descendant schema for even more particular kinds of product (e.g., magazines, video games, cereals, shirts, etc.). The shareability and extensibility of RDF also allows metadata authors to use multiple inheritance to mix definitions, providing multiple views of their data, and leveraging the work done by others. From a practical standpoint, the creation of a simple and generic product and company description base schemas which can thereafter be extending using RDF allows basic information about products and companies to be made available early, allowing more elaborate schemas to evolve as experience with the simpler system suggests their utility) [see the discussion beginning at col.25, line 10].

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Call does not specifically teach “*means for importing the second schema into the document instance.*”

Ra teaches means for importing the second schema into the document instance (*e.g., a view mechanism ... to provide programs with customized data representation, and second, schema evolution integrated with view support would provide extensibility of the system to allow for the incorporation of new data as required by new applications; see sections 3.2 - 3.3 and figs. 2-3*).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Call with Ra because it would have provided the capability for transferring requests for specific information to preferred sources of that information on the Internet.

As to claim 26:

Call teaches the markup language is XML (*e.g., XML; col.25, line 11*).

As to claim 30:

Call teaches means for using an extension of the first tag, wherein the extension of the first tag is used in a location reserved for the first tag in the document instance (*e.g., Using the Document Type Descriptor (DTD) component of XML, the makeup of the required and optional components of such information can be defined in a*

standard way ... The shareability and extensibility of RDF also allows metadata authors to use multiple inheritance to mix definitions, providing multiple views of their data, and leveraging the work done by others. From a practical standpoint, the creation of a simple and generic product and company description base schemas which can thereafter be extending using RDF allows basic information about products and companies to be made available early [see the discussion beginning at col.25, line 10].

As to claim 14:

The rejection of claim 25 above is incorporated herein in full. Additionally, Call teaches providing references for locating the first schema and second schema in the first electronic document (*e.g., The manner in which explicit relationships between two or more data objects, such as a retailer's product list page and the product information about a product listed on that page, may be expressed as a link asserted in elements contained in XML documents. These "XLinks" is the simplest case are like the HTML links described above in that they are expressed at one end of the link only, are initiated by users to initiate travel to the other end of the link, go only to one destination (which may be determined by a DNS server or by an independent cross-referencing server), and produce an effect which is mainly determined by the browser ... the XLink specification will provide more sophisticated multi-ended and typed links which can be used to advantage to automatically incorporate linked-in product information from one or more manufacturers into displays and multimedia presentations presented by retailers and*

others; col. 24, line 46-65 and col. 28, lines 28-63), wherein the first tag and the second tag are used to encoded text within the first electronic document (e.g., provides a mechanism for defining metadata in a class system much like the class systems used by object oriented programming and modeling systems. Classes are organized in a hierarchy, with a collection of classes used for a particular purpose (such as the collection of classes describing a "product" and/or the collection of classes describing a "company") being called a "schema." RDF thus offers extensibility through subclass definition. For example, creating subclasses for a particular kinds of product (e.g., publications, software, foods, clothing, etc.) requires only incremental modification of a base "product" schema, and each such subclass may then be further modified to form descendant schema for even more particular kinds of product (e.g., magazines, video games, cereals, shirts, etc.). The shareability and extensibility of RDF also allows metadata authors to use multiple inheritance to mix definitions, providing multiple views of their data, and leveraging the work done by others. From a practical standpoint, the creation of a simple and generic product and company description base schemas which can thereafter be extending using RDF allows basic information about products and companies to be made available early, allowing more elaborate schemas to evolve as experience with the simpler system suggests their utility ... providing accurate and up-to-date text descriptions of its products, along with whatever images best describe the product, simply by registering the relationship between the manufacturers company code and/or universal product code(s) with the appropriate authority; col. 25, line 37-col. 26, line 4).

As to claim 15:

Call teaches parsing the first electronic document, wherein the first electronic document is parsed by a parser for the markup language, the parser being stored on the server (*e.g., The ability to select only a portion of an XML product description document for reproduction on a web page is provided by the Xpointer protocol...the XML Pointer Language (Xpointer) document specifies a language that supports addressing into the internal structures of XML documents. In particular, it provides for specific reference to elements, character strings, and other parts of XML documents, whether or not they bear an explicit ID attribute. Using Xpointer, only selected portions of an XML product description made available from the manufacturer's server need be presented on a given web page, enabling the creator of the web page which links in XML data to control the nature and extent of the information shown; col.24, lines 31-45*).

As to claim 16:

Call teaches the second tag is used in a location reserved for the first tag in the electronic document (*e.g., The manner in which explicit relationships between two or more data objects, such as a retailer's product list page and the product information about a product listed on that page, may be expressed as a link asserted in elements contained in XML documents. These "XLinks" is the simplest case are like the HTML links described above in that they are expressed at one end of the*

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link only, are initiated by users to initiate travel to the other end of the link, go only to one destination (which may be determined by a DNS server or by an independent cross-referencing server), and produce an effect which is mainly determined by the browser ... the XLink specification will provide more sophisticated multi-ended and typed links which can be used to advantage to automatically incorporate linked-in product information from one or more manufacturers into displays and multimedia presentations presented by retailers and others; col. 24, line 46-65 and col. 28, lines 28-63).

As to claim 17:

Refer to the discussion of claim 26 above for rejection.

As to claim 18:

Call teaches the first document corresponds to, among other things, a purchase order (*e.g., the purchase order; see the discussion beginning at col.26, line 31 and col. 30, line 19).*

As to claim 20:

Call teaches accessing the second schema in a second electronic document, wherein the second tag is used to encode the second electronic document (*e.g., RDF provides a mechanism for defining metadata ... RDF thus offers extensibility through subclass definition... The shareability and extensibility of RDF also allows metadata authors to*

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use multiple inheritance to mix definitions, providing multiple views of their data, and leveraging the work done by others. From a practical standpoint, the creation of a simple and generic product and company description base schemas which can thereafter be extending using RDF allows basic information about products and companies to be made available early, allowing more elaborate schemas to evolve as experience with the simpler system suggests their utility; col.25, lines 36-60).

As to claim 21:

Call teaches parsing the first electronic document, wherein the first electronic document is parsed by a parser for the markup language, the parser being stored on the server (*e.g., The ability to select only a portion of an XML product description document for reproduction on a web page is provided by the Xpointer protocol...the XML Pointer Language (Xpointer) document specifies a language that supports addressing into the internal structures of XML documents. In particular, it provides for specific reference to elements, character strings, and other parts of XML documents, whether or not they bear an explicit ID attribute. Using Xpointer, only selected portions of an XML product description made available from the manufacturer's server need be presented on a given web page, enabling the creator of the web page which links in XML data to control the nature and extent of the information shown; col.24, lines 31-45).*

As to claim 22:

Refer to the discussion of claim 26 above for rejection.

As to claim 23:

Call teaches the second document corresponds to a commercial transaction (*e.g., purchase orders, special promotion pricing, purchase order confirmations*) [see col.29, line 61-col.30, line 33].

As to claim 24:

Call teaches the commercial transaction is selected from, among other things, an purchase order (*e.g., purchase orders; col.26, lines 32-33*).

As to claim 31:

The rejection of claim 25 above is incorporated herein in full. Additionally, Call teaches accessing different servers (*e.g., different servers; see col.4, line 20-col.5, line 60*), wherein the first schema is used to encode text (*e.g., defining metadata in a class system much like the class systems used by object oriented programming ... a base "product" schema ...company description based schemas; col. 25, lines 37-60*).

Call does not specifically teach accessing the first and second schemas from different servers.

Ra teaches accessing the first and second schemas from different servers (*see pp.602-603*).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Call with Ra because it would have provided extensibility of the system to allow for the incorporation of new data as required by new applications.

As to claim 32:

Call teaches the computer network system is used to conduct a commercial transaction (*e.g., purchase orders*) between two or more trading partners (*e.g., vendor, customer*) [*see col.29, line 61-col.30, line 33*].

As to claim 33:

Call teaches the XML document corresponds to the commercial transaction [*e.g., By storing product information expressed in Extensible Markup Language (XML)...*
Other characteristics of XML, including the ability to encourage or enforce conformity with content and formatting standards through the use of Document Type Definitions (DTD's) and the Resource Definition Framework (RDF) and Syntax Specification, facilitate the integration of data from retailers and other web page producers with the product information provided by manufacturers ;see col.3, lines 1-14/ The manufacturers preferably provide product information to their

connected server in the form of well-formed Extensible Markup Language (XML) documents which may be validated against a standard Document Type Definition (DTD) to which all such product information documents should conform. The schema to which such documents adhere may be advantageously expressed in the Resource Description Framework (RDF) and Syntax Specification, as noted earlier, to facilitate the evolution of standardized content definitions for product and company information; col.32, lines 6-16].

As to claim 34:

Call teaches the commercial transaction is, among other things, a purchase order (e.g., *the purchase order; col.26, line 31 and col. 30, line 19*).

As to claim 35:

Call teaches parsing the XML document, wherein the document is parsed by an XML processor residing on the fourth server from the plurality of servers (e.g., *The ability to select only a portion of an XML product description document for reproduction on a web page is provided by the Xpointer protocol...the XML Pointer Language (Xpointer) document specifies a language that supports addressing into the internal structures of XML documents. In particular, it provides for specific reference to elements, character strings, and other parts of XML documents, whether or not they bear an explicit ID attribute. Using Xpointer, only selected portions of an XML product description made available from the manufacturer's*

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server need be presented on a given web page, enabling the creator of the web page which links in XML data to control the nature and extent of the information shown; col.24, lines 31-45).

As to claim 36:

The rejection of claim 25 above is incorporated herein in full. Additionally, Call teaches wherein an application designed to work with the first tag can process the text encoded using the second tag, when the encoding is within the scope of the first tag, without modifying the application, whereby document types and applications can evolve separately (*e.g., the information which the manufacturer makes available can advantageously be stored using the Extensible Markup Language (XML), which is also well suited for providing metadata which defines and describes the meaning of the various kinds of information that can be provided about individual products, groups of products, and the manufacturers and distributors from which those products are obtained ... a retailer creating a computerized inventory control system for the first time with previously purchased merchandise may use a conventional hand-held barcode scanner to capture the universal product codes from all goods in inventory, and then retrieve complete and accurate product description records for each product via the Internet using the present invention ... to verify, update and add to the product information specified by the universal product code at the time that data is referred to or relied upon. In addition, or in the alternative, the database can be periodically and automatically verified against current data made available by the manufacturer and updated to insure*

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the continued completeness and accuracy of the entire local database; col. 12, line 31-col.13, line 23).

As to claim 37:

Note the discussion of claim 31 above for rejection.

Response to Arguments

- 4 Applicant's arguments filed 03/07/2007 have been fully considered but they are not persuasive.

Applicant argues in substance that Call does not teach *a definition of a second tag ...using first and second tags to encode text with in the first electronic document* [Remarks, page 7].

In response, Call teaches a definition of a second tag ...using first and second tags to encode text with in the first electronic document (*e.g., Using the Document Type Descriptor (DTD) component of XML*) by reference to the first tag that incorporates in the second schema the plurality of elements from the markup language and by including additional elements (*e.g., The metadata capabilities of XML can be used to advantage to provide an extensible system for dividing product and company information into a hierarchy of nested named elements which can be selectively*

*accessed. Using the Document Type Descriptor (DTD) component of XML, the makeup of the required and optional components of such information can be defined in a standard way, facilitating the definition and validation of data structures to be used on various classes of products ... RDF provides a mechanism for defining metadata in a class system much like the class systems used by object oriented programming and modeling systems. Classes are organized in a hierarchy, with a collection of classes used for a particular purpose (such as the collection of classes describing a "product" and/or the collection of classes describing a "company") being called a "schema." RDF thus offers **extensibility through subclass definition**. For example, creating subclasses for a particular kinds of product (e.g., publications, software, foods, clothing, etc.) requires only incremental modification of a **base "product" schema**, and each such subclass may then be further modified to form **descendant schema** for even more particular kinds of product (e.g., magazines, video games, cereals, shirts, etc.). The shareability and extensibility of RDF also allows metadata authors to use multiple inheritance to mix definitions, providing multiple views of their data, and leveraging the work done by others. From a practical standpoint, the creation of a simple and generic product and company **description base schemas** which can thereafter be extending using RDF allows basic information about products and companies to be made available early, **allowing more elaborate schemas to evolve as experience with the simpler system suggests their utility**) [see the discussion beginning at col.25, line 10].*

Conclusion

5. The prior art made of record, listed on PTO 892 provided to Applicant is considered to have relevancy to the claimed invention. Applicant should review each identified reference carefully before responding to this office action to properly advance the case in light of the prior art.

Contact information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maikhanh Nguyen whose telephone number is (571) 272-4093. The examiner can normally be reached on Monday - Friday from 9:00am – 5:30 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon can be reached on (571) 272-4136.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Any response to this action should be mailed to:

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Alexandria, VA 22313-1450

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PRIMARY EXAMINER